BISS Biodiversity Information Science and Standards

Biodiversity Information Science and Standards 2: e25869
doi: 10.3897/biss.2.25869

OPEN ACCESS

Conference Abstract

Comparison of species information TDWG standards from the point of view of the Plinian Core specification

Francisco Pando ‡

‡ Real Jardin Botanico -CSIC, Madrid, Spain

Corresponding author: Francisco Pando (pando@rjb.csic.es)

Received: 16 Apr 2018 | Published: 17 May 2018

Citation: Pando F (2018) Comparison of species information TDWG standards from the point of view of the Plinian Core specification. Biodiversity Information Science and Standards 2: e25869.
https://doi.org/10.3897/biss.2.25869

Abstract

Species level information, as an important component of the biodiversity information landscape, is an area where some TDWG standards and activities, coincide. Plinian Core (Plinian Core Task Group 2018) is a generalistic specification that covers aspects such species descriptions and nomenclature, as well as many others (legal, conservation, management, etc.). While the Plinian Core non-biological terms have no counterpart in the TDWG developments, some of its biological ones have, and that is the focus of this work. First, it must be noticed that Plinian Core relies on some TDWG standards for specific facets of species information:

Standard: Darwin Core (Darwin Core maintenance group, Biodiversity Information Standards (TDWG) 2014)

Elements: taxonConceptID, Hierarchy, MeasurementOrFact, ResourceRelationShip.

Standard:Ecological Metadata Language (EML project members 2011)

Elements: associatedParty, keywordSet, coverage, dataset

Standard:Encyclopedia of Life Schema (EOL Team 2012)

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Elements: AncillaryData: DataObjectBase

Standard:Global Invasive Species Network (GISIN 2008)

Elements: origin, presence, persistence, distribution, harmful, modified, startValidDate, endValidDate, countryCode, stateProvince, county, localityName, county, language, citation, abundance...

Standard:Taxon Concept Schema. TCS (Taxonomic Names and Concepts interest group 2006)

Elements: scientificName

Given the direct dependency of Plinian Core for these terms, they do not pose any compatibility or interoperability problem. However, biological descriptions --especially structured ones-- are the object of DELTA (Dallwitz 2006) and the Structured Descriptive Data (SDD) (Hagedorn et al. 2005), and also covered by Plinian Core. This convergence presents overlaps, mismatches and nuances, which discussion is the core of this work.

Using some species descriptions as a test case, and transforming them between these standards (Plinian Core, DELTA, and SDD), the strengths and compatibility issues of these specifications are evaluated and discussed.

Some operational aspects of Plinian Core in relation to GBIF's IPT (GBIF Secretariat 2016) and the INSPIRE directive (European Commission 2007) are also reviewed.

Presenting author

Francisco Pando

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